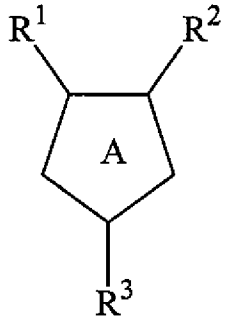
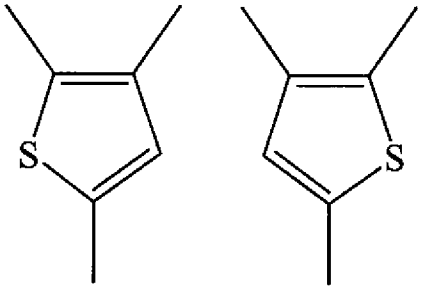
AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for ~~prophylaxis or~~ treatment of hypertension~~, premature birth~~, irritable bowel syndrome, chronic heart failure, angina, cardiac infarction, cerebral infarction, ~~subarachnoid hemorrhage,~~ cerebral vasospasm, ~~cerebral hypoxia, peripheral blood vessel disorder, anxiety, male pattern baldness,~~ erectile dysfunction, ~~other diabetic complication, sterility, urolithiasis and pain accompanied thereby,~~ pollakiuria, urinary incontinence, ~~nocturnal enuresis, asthma, chronic obstructive pulmonary disease, cough accompanied by asthma or chronic obstructive pulmonary disease,~~ cerebral apoplexy, cerebral ischemia or traumatic encephalopathy, which comprises administering an effective amount of a 5-membered heterocyclic compound of the formula (I):



(I)

wherein ring A is a ring represented by one of the formulae:



R^1 is a substituted or unsubstituted thiophene;

R^2 is an alkyl substituted by carboxy; and

R^3 is a substituted or unsubstituted pyridyl, a substituted or unsubstituted pyrimidinyl;

or a pharmaceutically acceptable salt thereof as an active ingredient.

2. (Previously Presented) The method according to Claim 1,

wherein R^1 is thiophene which may be substituted by a substituent(s) selected from the group consisting of nitro, hydroxy, formyl, carbamoyl, cyano, amino, carboxy, alkoxycarbonyl, halogen, alkyl, hydroxyalkyl, alkoxy, mono- or di-alkylamino, mono- or di-alkanoylamino, alkylthio, alkylsulfonyl, alkylsulfinyl, sulfamoyl and mono- or di-alkylsulfamoyl

R^3 is (1) a pyridine which may be substituted by a substituent(s) selected from the group consisting of oxo, cyano, nitro, amino, halogen, carboxy, hydroxy, formyl, carbamoyl, mono- or di-alkylamino, N-alkyl-N-cycloalkylamino, aminoalkyl, mono- or di-alkylaminoalkyl, mono- or di-alkylcarbamoyl, alkyl, hydroxyalkyl, alkoxy, alkoxyalkyl, alkoxycarbonyl, alkanoyl, sulfo, alkylthio, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkylsulfinyl and heterocycle or (2) a pyrimidine which may be substituted by a substituent(s) selected from the group consisting of oxo, cyano, nitro, amino, halogen, carboxy, hydroxy, formyl, carbamoyl, mono- or di-alkylamino, N-alkyl-N-cycloalkylamino, aminoalkyl, mono- or di-alkylaminoalkyl, mono- or di-alkylcarbamoyl, alkyl, hydroxyalkyl, alkoxy, alkoxyalkyl, alkoxycarbonyl, alkanoyl, sulfo, alkylthio, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkylsulfinyl and heterocycle or (3) an alkyl which may be substituted by a substituent(s) selected from the group consisting of hydroxy, cyano, carboxy, carbamoyl, amino, mono- or di-alkylamino, alkanoylamino, alkylsulfonylamino, hydroxyamino, mono- or di-alkylcarbamoyl, trifluoromethyl, halogen, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkoxycarbonyl and heterocycle.

3. (Cancelled)

4. (Previously Presented) The method according to Claim 1,

wherein R^1 is a thiophene which may be substituted by halogen or alkyl; and

R^3 is (1) a pyridyl which may be substituted by one or two substituent(s) selected from the group consisting of amino, halogen, alkyl, alkoxy, mono- or di-alkylamino and alkylthio or (2) pyrimidinyl which may be substituted by one or two substituent(s) selected from the group consisting of amino, halogen, alkyl, alkoxy, mono- or di-alkylamino and alkylthio.

5. (Previously Presented) The method according to Claim 1, wherein R^1 is (1) thienyl which may be substituted by halogen; and R^3 is (1) pyridyl which may be substituted by a substituent(s) selected from the group consisting of alkyl, alkoxy and dialkylamino, or (2) pyrimidinyl which may be substituted by alkoxy, alkyl, dialkylamino or alkylthio.

6. (Previously Presented) The method according to Claim 1,

wherein R^1 is (1) thienyl which may be substituted by halogen;

R^3 is (1) pyridyl which may be substituted by a substituent(s) selected from the group consisting of alkyl, alkoxy and dialkylamino, or (2) pyrimidinyl which may be substituted by alkoxy or dialkylamino.

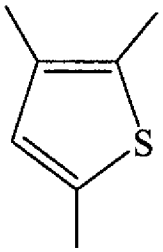
7. (Previously Presented) The method according to Claim 1,

wherein R^1 is thienyl which may be substituted by halogen; and

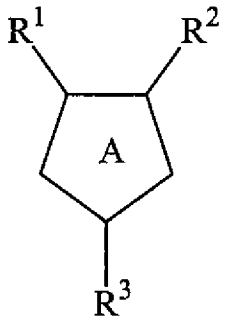
R^3 is (1) pyridyl which may be substituted by alkoxy or dialkylamino, or (2) pyrimidinyl which may be substituted by dialkylamino.

8. (Previously Presented) The method according to Claim 1, wherein R^2 is carboxymethyl.

9. (Currently Amended) The method according to Claim 1, wherein the Ring A is a ring represented by the following ~~formulae~~ formula:

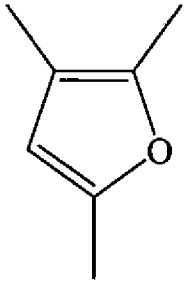


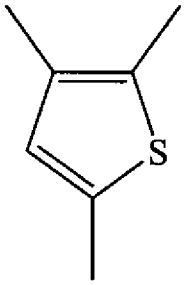
10. (Withdrawn) A 5-membered heterocyclic compound of the formula (II):

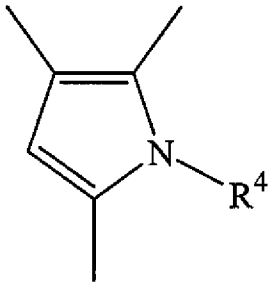


(II)

wherein ring A is a ring represented by any one of the formulae:







R^1 is a substituted or unsubstituted aryl, a substituted or unsubstituted heterocycle or a substituted or unsubstituted heterocycle-substituted carbonyl;

R^2 is a substituted alkyl;

R^3 is a substituted or unsubstituted aryl, a substituted or unsubstituted heterocycle or a substituted or unsubstituted alkyl; and

R^4 is hydrogen or a substituted or unsubstituted alkyl;

provided that when R^1 and R^3 are phenyl, R^2 is not carboxymethyl or ethoxycarbonylmethyl,

or a pharmaceutically acceptable salt thereof.

11. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 10, wherein R^1 is a substituted or unsubstituted heterocycle, a substituted or unsubstituted heterocycle-substituted carbonyl, or an aryl substituted by two halogens.

12. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 10,

wherein R^1 is (1) an aryl which may be substituted by a substituent(s) selected from the group consisting of nitro, amino, hydroxy, carbamoyl, cyano, carboxy, trifluoromethyl, alkoxycarbonyl, halogen, alkyl, hydroxyalkyl, alkoxy, alkoxyalkoxy, mono- or di-alkylamino, mono- or di-alkanoylamino, alkylthio, alkylsulfonyl, alkylsulfinyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkylsulfonylamino and phenylalkoxy, (2) a heterocycle which may be substituted by a substituent(s) selected from the group consisting of nitro, hydroxy, formyl, carbamoyl, cyano, amino, carboxy, alkoxycarbonyl, halogen, alkyl, hydroxyalkyl, alkoxy, mono- or di-alkylamino, mono- or di-alkanoylamino, alkylthio, alkylsulfonyl, alkylsulfinyl, sulfamoyl and mono- or di-alkylsulfamoyl, or (3) a heterocycle-substituted carbonyl which may be substituted by a substituent(s) selected from the group consisting of nitro, hydroxy, carbamoyl, cyano, carboxy, alkoxycarbonyl, halogen, alkyl, hydroxyalkyl, alkoxy, alkanoyl, mono- or di-alkylamino, mono- or di-alkanoylamino, alkylthio, alkylsulfonyl, alkylsulfinyl, sulfamoyl and mono- or di-alkylsulfamoyl;

R^2 is an alkyl which may be substituted by a substituent(s) selected from the group consisting of halogen, hydroxy, cyano, carboxy, carbamoyl, amino, aminosulfonyl, amidinothio, mono- or di-alkylamino, alkanoylamino, alkylsulfonylamino, hydroxyamino, mono- or di-alkylcarbamoyl, trifluoromethyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfonylamino, hydroxycarbamoyl, hydroxycarbamoyl which is substituted by one or two alkyl(s), alkylsulfonylcarbamoyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkoxycarbonyl, heterocycle, heterocycle-substituted carbamoyl, heterocycle-substituted alkylcarbamoyl and heterocycle-substituted sulfonylcarbamoyl;

R^3 is (1) an aryl which may be substituted by a substituent(s) selected from the group consisting of cyano, nitro, amino, halogen, trifluoromethyl, carboxy, hydroxy, carbamoyl, mono- or di-alkylamino, aminoalkyl, mono- or di-alkylaminoalkyl, mono- or di-alkylcarbamoyl, alkyl, hydroxyalkyl, alkoxy, alkoxycarbonyl, alkanoyl, alkanoyloxy, alkanoyloxyalkyl, sulfo, alkylthio, alkylthioalkyl, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl and alkylsulfinyl, (2) a heterocycle which may be substituted by a substituent(s) selected from the group consisting of oxo, cyano, nitro, amino, halogen, carboxy, hydroxy, formyl, carbamoyl, mono- or di-alkylamino, N-alkyl-N-cycloalkylamino, aminoalkyl, mono- or di-alkylaminoalkyl, mono- or di-alkylcarbamoyl, alkyl, hydroxyalkyl, alkoxy, alkoxyalkyl, alkoxycarbonyl, alkanoyl, sulfo, alkylthio, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkylsulfinyl and heterocycle or (3) an alkyl which may be substituted by a substituent(s) selected from the group consisting of hydroxy, cyano, carboxy, carbamoyl, amino, mono- or di-alkylamino, alkanoylamino, alkylsulfonylamino, hydroxyamino, mono- or di-alkylcarbamoyl, trifluoromethyl, halogen, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkoxycarbonyl and heterocycle; and

R^4 is (1) hydrogen or (2) an alkyl which may be substituted by mono- or di-alkylamino.

13. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 10,

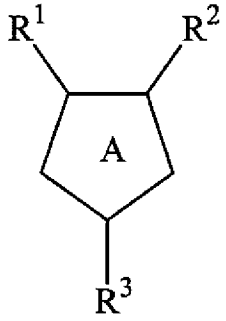
wherein R^1 is (1) an aryl which may be substituted by one or two halogen(s), or (2) a heterocycle which may be substituted by halogen or alkyl;

R^2 is an alkyl which may be substituted by a substituent(s) selected from the group consisting of carboxy, carbamoyl, mono- or di-alkylcarbamoyl, hydroxycarbamoyl, hydroxycarbamoyl which is substituted by one or two alkyl(s), alkoxycarbonyl, alkylsulfonylcarbamoyl and heterocycle; and

R^3 is (1) a heterocycle which may be substituted by one or two substituent(s) selected from the group consisting of amino, halogen, alkyl, alkoxy, mono- or di-alkylamino and alkylthio, or (2) an aryl which may be substituted by a substituent(s) selected from the group consisting of amino, halogen, alkyl, alkylthio, alkoxy and mono- or di-alkylamino; and

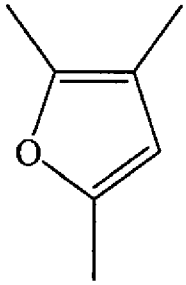
R^4 is hydrogen or alkyl.

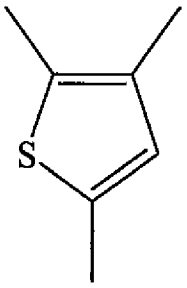
14. (Withdrawn) A 5-membered heterocyclic compound of the formula (III):

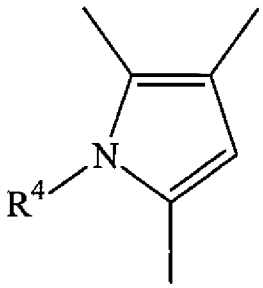


(III)

wherein ring A is a ring represented by any one of the formulae:







R^1 is a substituted or unsubstituted thienyl, or an aryl substituted by two halogens;

R^2 is substituted alkyl;

R^3 is a substituted or unsubstituted aryl, a substituted or unsubstituted heterocycle or a substituted or unsubstituted alkyl; and

R^4 is hydrogen or a substituted or unsubstituted alkyl;

provided that when R^1 is 2-thienyl, R^3 is not 2-thienyl;

or a pharmaceutically acceptable salt thereof.

15.(Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 14,

wherein R^2 is an alkyl which may be substituted by a substituent(s) selected from the group consisting of halogen, hydroxy, cyano, carboxy, carbamoyl, amino, aminosulfonyl, amidinothio, mono- or di-alkylamino, alkanoylamino, alkylsulfonylamino, hydroxyamino, mono- or di-alkylcarbamoyl, trifluoromethyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfonylamino, hydroxycarbamoyl, hydroxycarbamoyl which is substituted by one or two alkyl(s), alkylsulfonylcarbamoyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkoxycarbonyl, heterocycle, heterocycle-substituted carbamoyl, heterocycle-substituted alkylcarbamoyl and heterocycle-substituted sulfonylcarbamoyl;

R^3 is (1) an aryl which may be substituted by a substituent(s) selected from the group consisting of cyano, nitro, amino, halogen, trifluoromethyl, carboxy, hydroxy, carbamoyl, mono- or di-alkylamino, aminoalkyl, mono- or di-alkylaminoalkyl, mono- or di-alkylcarbamoyl, alkyl, hydroxyalkyl, alkoxy, alkoxycarbonyl, alkanoyl, alkanoyloxy, alkanoyloxyalkyl, sulfo, alkylthio, alkylthioalkyl, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl and alkylsulfinyl, (2) a heterocycle which may be substituted by a substituent(s) selected from the group consisting of oxo, cyano, nitro, amino, halogen, carboxy, hydroxy, formyl, carbamoyl, mono- or di-alkylamino, N-alkyl-N-cycloalkylamino, aminoalkyl, mono- or di-alkylaminoalkyl, mono- or di-alkylcarbamoyl, alkyl, hydroxyalkyl, alkoxy, alkoxyalkyl, alkoxycarbonyl, alkanoyl, sulfo, alkylthio, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkylsulfinyl and heterocycle or

(3) an alkyl which may be substituted by a substituent(s) selected from the group consisting of hydroxy, cyano, carboxy, carbamoyl, amino,

mono- or di-alkylamino, alkanoylamino, alkylsulfonylamino, hydroxyamino, mono- or di-alkylcarbamoyl, trifluoromethyl, halogen, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, sulfamoyl, mono- or di-alkylsulfamoyl, alkoxycarbonyl and heterocycle; and

R^4 is (1) hydrogen or (2) an alkyl which may be substituted by mono- or di-alkylamino.

16. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 14,

wherein R^2 is an alkyl which may be substituted by a substituent(s) selected from the group consisting of carboxy, carbamoyl, mono- or di-alkylcarbamoyl, hydroxycarbamoyl, hydroxycarbamoyl which is substituted by one or two alkyl(s), alkoxycarbonyl, alkylsulfonylcarbamoyl and heterocycle;

R^3 is (1) a heterocycle which may be substituted by one or two substituent(s) selected from the group consisting of amino, halogen, alkyl, alkoxy, mono- or di-alkylamino and alkylthio, or (2) an aryl which may be substituted by a substituent(s) selected from the group consisting of amino, halogen, alkyl, alkylthio, alkoxy and mono- or di-alkylamino; and

R^4 is hydrogen or alkyl.

17. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 10,

wherein R^1 is thienyl which may be substituted by halogen(s);

R^2 is (1) carboxyalkyl, (2) carbamoylalkyl, (3) mono- or di-alkylcarbamoylalkyl, (4) alkoxycarbonylalkyl, (5) alkylsulfonylcarbamoylalkyl or (6) tetrazolylalkyl;

R^3 is (1) benzothienyl which may be substituted by halogen, (2) phenyl which may be substituted by a substituent(s) selected from the group consisting of halogen, alkylthio, alkyl, alkoxy and dialkylamino, (3) pyridyl which may be substituted by a substituent(s) selected from the group consisting of alkyl, alkoxy and dialkylamino, (4) pyrimidinyl which may be substituted by alkoxy, alkyl, dialkylamino or alkylthio, (5) thienyl which may be substituted by one or two alkyl(s), (6) thieno[3,2-b]pyridyl, (7) benzofuryl, (8) dihydrobenzofuryl or (9) indolyl which may be substituted by alkyl; and

R^4 is hydrogen or alkyl.

18. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 17,

wherein R^2 is (1) carboxyalkyl, (2) carbamoylalkyl, (3) mono- or di-alkylcarbamoylalkyl or (4) alkoxycarbonylalkyl; and

R^3 is (1) benzothienyl which may be substituted by halogen, (2) phenyl which may be substituted by a substituent(s) selected from the group consisting of halogen, alkylthio, alkyl, alkoxy and dialkylamino, (3) pyridyl which may be substituted by a substituent(s) selected from the group consisting of alkyl, alkoxy and dialkylamino, (4) pyrimidinyl which may be substituted by alkoxy or dialkylamino, (5) thienyl which may be substituted by one or two alkyl(s), (6) thieno[3,2-b]pyridyl, (7) benzofuryl, (8) dihydrobenzofuryl or (9) indolyl which may be substituted by alkyl.

19. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 17,

wherein R^2 is carboxyalkyl or alkoxycarbonylalkyl; and

R^3 is (1) benzothienyl which may be substituted by halogen, (2) phenyl which may be substituted by a substituent(s) selected from the group consisting of halogen, alkylthio, alkoxy and dialkylamino, (3) pyridyl which may be substituted by a substituent(s) selected from the group consisting of alkyl, alkoxy and dialkylamino, (4) pyrimidinyl which may be substituted by

dialkylamino, (5) thienyl which may be substituted by one or two alkyl(s), (6) thieno[3,2-b]pyridyl or (7) indolyl which may be substituted by alkyl.

20. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 17, wherein R^2 is carboxymethyl or alkoxy-carbonylmethyl.

21. (Withdrawn) The 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 17, wherein ring A is furan or thiophen.

22. (Withdrawn) A compound selected from the group consisting of the compounds described in the examples and preferable examples in the specification, or a pharmaceutically acceptable salt thereof.

23. (Withdrawn) A medicine comprising the 5-membered heterocyclic compound or a pharmaceutically acceptable salt thereof according to Claim 10.

24. (Cancelled)

25. (Currently Amended) The method according to Claim 1, which is for the ~~prophylaxis and/or~~ treatment of pollakiuria or urinary incontinence.